

## Workshop on Energy Recovery Linacs (ERL2015)

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## ERL: beam dynamics and optics working group charge

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WG2 will address the optics and beam dynamics challenges in ERLs. It will include lessons learnt from past and present ERL operation as well as issues arising during the design work on future ERL facilities. The group scope includes design approaches for one-pass and multi-pass ERL lattices, error tolerances, preserving longitudinal and transverse beam emittances during beam transport, simulation tools suitable for ERL modelling. We also will look at beam instabilities and collective effects as well as at mechanisms defining halo formation and beam losses.